

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

NOTES ON HORSFIELD'S 'ZOOLOGICAL RESEARCHES
IN JAVA.'

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Thomas Horsfield's 'Researches in Java'¹ is a well-known book. As the preface states, the "design of the undertaking was to exhibit accurate Figures, accompanied by detailed descriptions, of the most interesting Quadrupeds and Birds collected during my residence in Java."

Most of the new species of birds here fully described and figured had been previously introduced to science in a paper by the same author, entitled 'Systematic Arrangement and Description of Birds from the Island of Java,'² but more definite localities for many of them are here added. Furthermore, Horsfield had access to the manuscript, and later evidently to the proof sheets of Sir Stamford Raffles' 'Descriptive Catalogue of a Zoological Collection, made on account of the Honourable East India Company, in the Island of Sumatra and its Vicinity.'³

'Zoological Researches in Java' consists of 32 plates of mammals and an equal number of plates of birds, with 7 plates of osteological and structural details of both mammals and birds, a total of 71 plates. It was issued in eight parts, each consisting of four plates of mammals, four plates of birds, with descriptive text, and, in all but part 8, an additional plate of "illustrations." In addition there are 10 supplemental pages containing a "General Catalogue of Javanese Birds, arranged in the

¹Zoological Researches in Java and the Neighbouring Islands, 1821-1824; pls. I-LXXI [not numbered], and text [not paged].

²Transactions Linnean Society London, XIII, pt. I, May, 1821, pp. 133-200.

³Transactions Linnean Society London, XIII, pt. I, May, 1821, pp. 239-274; *ibid.*, pt. II, 1822, pp. 277-340.

Museum of the Honourable East India Company;" direction for arranging the plates in binding; and a list of the birds and mammals arranged according to the contents of the parts as issued.

Zoologists are indebted to Dr. Charles W. Richmond for working out the dates of publication of the various parts of this work.¹ The supplemental pages were issued evidently in 1824 with Part 8, or subsequent thereto. The plates are not numbered and the text is unpagcd. Each plate of "illustrations" is accompanied by one page of explanations.

On page [9] of the supplemental text, following the list of Javanese birds, is the following statement, with a list of the species figured, the mammals and the birds being catalogued separately:

"The following order is proposed for the arrangement of the Subjects and Plates in the binding of the Volume. To facilitate the reference to the Plates of Illustration, the order in which the Subjects were given in the successive Numbers, is added. The Plates of Illustration should be bound, in the order of publication, at the end of the Volume."

The plates in this work are commonly cited by number, and ostensibly according to the above-mentioned arrangement for binding suggested in the supplementary pages, which would appear to be the logical sequence rather than the order of publication given (without, however, the plates of "illustrations") on page [10] of the supplement. The mammals, which are placed first and by which plates 1 to 32 are occupied, have been by authors correctly cited by plate numbers, but most of the birds have been commonly quoted wrong. This has arisen from the fact that on each of two of the bird plates there are figures of two species, and that two of the plates represent but one species. The four species on the two plates (*Muscicapa banyumas* and *Muscicapa hirundinacea* on plate 38, and *Timalia pileata* and *Timalia gularis* on plate 42) are given in the list proposed for arrangement of the plates in binding as though they occupied four plates, whereas for the two plates of *Irena puella* the species is entered only once. This has resulted in the citation of *Muscicapa hirundinacea* commonly as plate 39, whereas it appears on plate 38; and all the numbers following this are thus also out of order, as, for instance, *Anas arcuata*,

¹Cf. Mathews, *Birds of Australia*, VII, pt. 5, July 10, 1919, p. 475.

which is usually cited as plate 65. whereas there are only 64 plates of mammals and birds in the book! As an aid to the citation of these plates by number the following list of plates is given with the correct plate number for each.

<i>Mammals.</i>		<i>Birds.</i>	
Plate	1. <i>Simia syndactyla</i> .	Plate	33. <i>Falco ichthyæetus</i> .
	2. <i>Semnopithecus maurus</i> .		34. <i>Falco caerulescens</i> .
	3. <i>Semnopithecus pyrrhus</i> .		35. <i>Falco limnaeetus</i> .
	4. <i>Tarsius bancanus</i> .		36. <i>Strix badia</i> .
	5. <i>Cheiromeles torquatus</i> .		37. <i>Podargus javanensis</i> .
	6. <i>Nyctinomus tenuis</i>		38. { <i>Muscicapa banyumas</i> .
	7. <i>Rhinolophus larvatus</i> .		{ <i>Muscicapa hirundinacea</i> .
	8. <i>Rhinolophus nobilis</i> .		39. <i>Muscicapa indigo</i> .
	9. <i>Vespertilio temminckii</i> .		40. <i>Turdus varius</i> .
	10. <i>Pteropus javanicus</i> .		41. <i>Turdus cyaneus</i> .
	11. <i>Pteropus rostratus</i> .		42. { <i>Timalia pileata</i> .
	12. <i>Tupaia javanica</i> .		{ <i>Timalia gularis</i> .
	13. <i>Tupaia tana</i> .		43. <i>Iora scapularis</i> .
	14. <i>Ursus malayanus</i> .		44. <i>Oriolus xanthonotus</i> .
	15. <i>Gulo orientalis</i> .		45. <i>Irena puella</i> , male.
	16. <i>Mydaus meliceps</i> .		46. <i>Irena puella</i> , female.
	17. <i>Viverra musanga</i> .		47. <i>Motacilla speciosa</i> .
	18. <i>Viverra rasse</i> .		48. <i>Brachypteryx montana</i> .
	19. <i>Mangusta javanica</i> .		49. <i>Phrenotrix temia</i> .
	20. <i>Lutra leptonyx</i> .		50. <i>Pomatorhinus montanus</i> .
	21. <i>Felis javanensis</i> .		51. <i>Prinia familiaris</i> .
	22. <i>Felis sumatrana</i> .		52. <i>Calyptomena viridis</i> .
	23. <i>Felis gracilis</i> .		53. <i>Eurylaimus javanicus</i> .
	24. <i>Mus setifer</i> .		54. <i>Alcedo biru</i> .
	25. <i>Sciurus insignis</i> .		55. <i>Dacelo pulchella</i> .
	26. <i>Sciurus plantani</i> .		56. <i>Phoenicophaeus javanicus</i> .
	27. <i>Sciurus bicolor</i> .		57. <i>Cuculus lugubris</i> .
	28. <i>Pteromys genibarb</i> .		58. <i>Cuculus xanthorhyncus</i> .
	29. <i>Pteromys lepidus</i> .		59. <i>Centropus philippensis</i> .
	30. <i>Rhinoceros sondaicus</i> .		60. <i>Perdix personata</i> .
	31. <i>Tapirus malayanus</i> .		61. <i>Ardea speciosa</i> .
	32. <i>Cervus muntjak</i> .		62. <i>Scolopax saturata</i> .
			63. <i>Parra superciliosa</i> .
			64. <i>Anas arcuata</i> .
	65. Illustrations to the first number.		
	66. Illustrations to the second number.		
	67. Illustrations to the third number.		
	68. Illustrations to the fourth number.		
	69. Illustrations to the fifth number.		
	70. Illustrations to the sixth number.		
	71. Illustrations to the seventh number.		

Further examination of this work reveals interesting details regarding some of the names of the species treated. For instance, the genus *Calyptomena* and the species *Calyptomena viridis*, plate 52 and text, were published in June, 1822, and quoted from "Sir T. S. Raffles Cat. of a Zool. Coll. made in Sumatra, Tr. Linn. Soc. XIII, p. 295, 1822." This new genus and species are in the *second* part of Raffles' paper, which appeared in Part II of the Transactions of the Linnean Society of London, volume XIII, which, so Dr. Richmond informs me, did not appear before November, 1822. Horsfield must thus have had access to the proof sheets of Raffles' paper, and his citation and prior publication make it therefore necessary to credit him with both the generic name *Calyptomena* and the specific name *Calyptomena viridis*. Fortunately this involves no change of name, but merely of authority.

The case, however, is somewhat different with *Anas arcuata*, published here on plate 64. This name has been in common use for a species of Tree Duck from Java and other islands of the East Indies. It is, however, as is readily seen by reference to page [2] of the text to this plate, merely a substitute name for *Anas javanica* Horsfield, introduced as follows: "for the name of *Anas javanica*, originally applied to it, I have substituted the name by which, according to the information communicated to me by M. Temminck, it is distinguished by M. Cuvier, in the Museum of Paris, in the specimens presented by M. Leschenault." It, therefore, becomes necessary to synonymize *Anas arcuata* Horsfield with *Dendrocygna javanica* (Horsfield), and to seek another name for the bird commonly called *Dendrocygna arcuata*. Since *Anas badia* Muller¹ is a nomen nudum, the earliest name for the species becomes *Dendrocygna vagans* Fraser.²

The case of the generic name *Entomothera* Horsfield, here first proposed in the text to plate 54, has already been discussed by the writer in a previous publication.³ Still another species will be treated in another connection.

¹Verhandel. Natur. Gesch. Nederland. oversee. besitt. Land-en Volkenk., 1839-1844, p. 159.

²*Dendrocygna vagans* Fraser, Zoologica Typica, 1849, pl. 68 and text ("Manila, Philippine Islands") (Eyton MS.).

³Proc. U. S. Nat. Mus., XLVIII, May 18, 1915, p. 642.